

After a few hours of clambering up and down hills we came upon a little house. Though visibly worried by our presence the occupant of the house greeted us cordially. There has been a resurgence of guerrilla activity in these parts making the locals wary of strangers.

Asked about *Nepenthes* the guy pointed to a clump of bushes twenty meters from the house. Quickly I headed for the spot where saud-saud-the local name for *Nepenthes* is supposed to be and lo and behold there it was. *N. alata* had been sitting there all these times waiting for the world to discover it.

We hurriedly made some preliminary tests, because night was fast closing in and took home samples. More tests will be done next time.

Being a newcomer to the world of *Nepenthes* I wondered what makes this plant thrive in this part of the world. One thing is certain though, very soon *Nepenthes* will become extinct because the area is a farming community and the plant is lumped together with weed to be slashed and burned.

A Real Nice Trip to Southeast Asia

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Ever since I (Ric Maulder) was knee high to a grasshopper, I have always wanted to go to the tropics. Well, I finally got my chance to go and went to Sumatra to look for *Nepenthes*. It seemed, at first, that I was going on my own so I planned to spend all seven weeks in Sumatra. I wanted to climb new mountain areas to look for new species. As I was working away on my itinerary, three other people decided to come along. The plans changed so that we decided to spend one month in Sumatra and the rest of the time in Sarawak and West Malaysia and look mainly in known locations.

With this in mind, we decided to use Singapore as our jump-off point into Sumatra stopping off at Medan first. Once there, we hired a van with a driver named Iwan and went south through Sumatra in 4 days to a village called Gisting near Tanjungkarang in Lampung district at the extreme southern end of the island. All the way down the trans-Sumatran highway we saw *Nepenthes* which were *N. tobaica*, *N. reinwardtiana* (very common in the general area), *N. gracilis*, *N. ampullaria* and *N. mirabilis*. We harvested seed of *N. gracilis* in the Jambi district. The weather in south Sumatra was rather dry and *N. mirabilis* was growing on real dry roadside banks.

From Gisting we climbed Gunung Tanggamus where we met our first leeches and had to camp near the horrors that night. It was funny to watch them moving over the tents during the night. In the morning we set off curving our way through solid ratans all the way up to 2,000 meters before they gave way to a pure moss forest. At this elevation, we found *N. gymnamphora* and two of us decided to return, but Mike and I wanted to find *N. spathulata*. Further up, it was virtually impossible to get around and we seemed to be 5 to 10 feet off the ground walking over moss-covered tree trunks. We never saw it like this on any other mountain in S.E. Asia. We managed to find some *N. spathulata* and they are a fine, large, glossy-green plant with large pitchers. We never reached the summit as we had also run out of time. So with a few cuttings and seedlings, we ran down the mountain barely reaching the other two explorers before

they reached the camp. As it was getting dark, we drank heaps of water once we returned to the van. Up the mountain we resorted to squeezing the moss to quench our thirst.

We headed back up the line and went to G. Dempo as we wanted to climb at least one unknown mountain. On this mountain, we found a new species related to the highland Sumatran species by its leaf shape, stem shape and inflorescence, but its upper pitchers are slightly similar to *N. alata* from the Philippines. We gave the name *N. 'dempoensis'* after the mountain from which it originated. The name is still *nomen nudum*.

Next, we headed to Bangko and over the range to Tapan. On the way over at the elevation of 1,250 meters we found *N. ampullaria* with large pitchers and below in Tapan and Inorapura areas, we found a number of lowland species and hybrids. We found *N. x hookeriana* here but no *N. rafflesiana*, however, we never looked in the forested areas. On the coast up to Padang, we saw more lowland *Nepenthes* and harvested seed of *N. mirabilis*.

Climbing G. Talang, we found *N. gymnamphora*, *N. pectinata*, *N. bongso*, *N. inermis* and also a strange-leaved *Nepenthes* with ovate lower pitchers and very wide non-petiolate leaves but slightly different from other Sumatran *Nepenthes*. However, the upper pitchers resembled large *N. bongso* or *N. macfarlanei* pitchers and it is probably allied to these species. We saved a few plants but also took cuttings and collected abundant seed of *N. bongso*. *Nepenthes inermis* is epiphytic and most of them were seen high up in the branches of trees. The plant has very small lower pitchers with a peristome like *N. lowii* and unusual upper pitcher development. These pitchers start out as a flat bud and then "pop" open into round pitchers with a very thin lid (as seen in the photo). We noticed that the fluid in the pitchers was very sticky and viscous because while I was in the tree, I tipped a pitcher and the fluid streamed out in a thin line to the ground over a distance of 15-20 feet. An interesting hybrid of *N. bongso x N. inermis* was found that is like *N. dubia* from G. talamau but still different. Although *N. bongso* and *N. gymnamphora* are terrestrial, *N. pectinata* was epiphytic. We also located a plant that had upper and lower pitchers like *N. bongso* but much larger and epiphytic. The leaves had a slightly different shape and feel to them and it may be a *N. bongso* hybrid.

It was good to use the rhino tracks to get up and down the mountain as they made walking a bit easier.

After returning to Padang, John flew back to New Zealand with the cuttings to look after them. So we waved goodbye to him as the DC-9 left Padang and we observed the *Utricularia exoleta* growing in the ditches by the side of the runway.

We went to Lake Maninjau and on the road to the lake spotted *N. reinwardtiana* and on the cliff tops some plants that looked like *N. tobaica* but with one long inflorescence. I supposed these were the *N. alata* from the Bukittingi area. We also saw them near Payakumbuh on similar cliff tops. These are definitely not the same plant species from the Sibolga area and I wish someone would study these so-called Sumatran *N. alata* variants. Anyway, I climbed the cliff in my bare feet which I often did on roadside jaunts and obtained some male and female cuttings as there was no ripe seed at the time.

We could not climb G. Merapi because it was active. We felt this was slight but the authorities wouldn't permit us to go up and advised against it. We wasted some time on trying to climb G. Sago as Bruce stayed at the hotel since he was sick. Mike and I walked for miles up a road which turned out to be the wrong track and led us to a 1,400 meter plateau in the middle of nowhere. The next day we tried another track walking all morning through rice paddies but eventually gave up G. Sago on this trip as we were behind on our itinerary.



New *Nepenthes* species from
G. Pangulubao Sumatra



N. rhombicaulis



N. spectabilis



N. northiana lower pitcher



N. gracillima (left)
N. gracillima x *N. macfarlanei* (middle)
N. macfarlanei (right)



N. spectabilis (left)
N. bongso x *N. inermis* (middle)
N. inermis (right)
 From G. Talang



N. macfarlanei



N. treubiana



N. sp. 'New Species'
From G. Pangulubao



N. bongso
From G. Talang

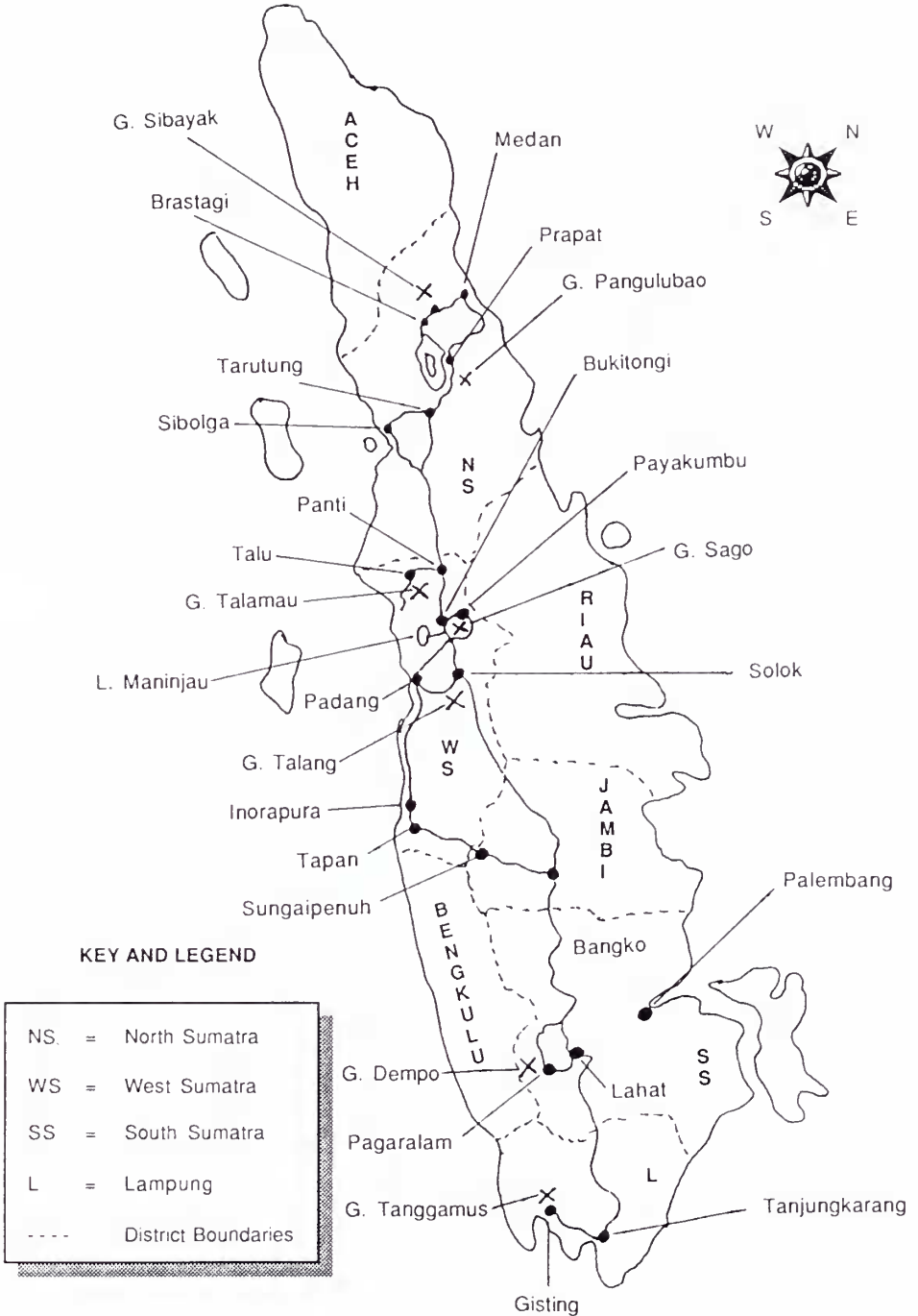


N. spathulata



N. alata

SUMATRA



We made our way up to G. Talamau and saw the usual *N. reinwardtiana* all along the way, but also saw yellow-flowered terrestrial *Utrix* which may be *U. subulata*. We thought it would take two days to climb it but after two days we made it only to 1,500 meters and due to lack of provisions, we had to turn back. Next time we plan to allow more time and more provisions.

We bypassed G. Lubukraya and went to Sibolga. South of Sibolga we found some lowland *Nepenthes* and hybrids with plenty of seed pods full of seed. The best of all the *N. gracilis* in S.E. Asia was the black type where we collected bits and pieces to take back. Also, we saw *N. truebiana* and *N. alata* and collected cuttings of these from areas that the farmers were burning off for cultivation. My impression is that *N. truebiana* of Sumatra is fairly closely related to *N. rafflesiana*. If you look at the leaf and stem, it has a very similar look and feel and the general plant habit is similar also. The lower pitchers are different though but we feel it is still rather closely related to *N. rafflesiana*. Some of the upper and intermediate pitchers were quite large and it competes with *N. spathulata* over which species has the largest pitchers in Sumatra.

We carried up toward Tarutung and still on the Sibolga road we found *N. tobaica* at 1,000 meters. These plants were growing to the southwest of Lake Toba which indicates that the *N. tobaica*'s range is wider than previously indicated. At Tarutung, *N. reinwardtiana* and *N. ampullaria* were seen on the way south. We harvested seed of both and a few red *N. reinwardtiana*.

The next 3 days were spent going in and out the bush around G. Panguluba. From 1,800 to 1,900 meters near G. Panguluba and G. sibok Manok, we found populations of *Nepenthes* with two different rosette pitchers. Neither plant had upper pitchers but one type had rhomboid-shaped stems on the climbing vine and may be *N. rhombicaulis* according to the plant in Knodo's book. One question we had was the variability of the pitchers and wondered if the red ones with wide peristomes, as shown in the photos, may be the same species.

On the higher steep slopes of G. Pangulubas, we saw several species of *Nepenthes* and also a small blue-flowered *Utricularia* growing in the sphagnum moss. One species of *Nepenthes* was growing prostrate 5-6 feet with no upper pitchers but the lower pitchers resembling *N. gymnamphora*.

The plant and inflorescences were miniature in size and the pitchers had teeth up to several millimeters. Another species we saw had lower pitchers very similar to the plant labeled *N. pectinata* in Kondo's book. The upper pitchers were very similar in size and shape to *N. bongso* from G. Talang. The whole plant is prostrate like *N. bongso* and the inflorescences are very short like *N. bongso* and one-flowered. Also observed, the lid has a very prominent glandular crest and from what I am aware, no Sumatran *Nepenthes* have a crest, only some have a glandular boss such as *N. caranculata* and *N. rhombicaulis*. However, these plants have a good crest like *N. pilosa* and *N. maxima* ect. They were mainly epiphytic but some were growing on the bases of trees or on logs. All others in the area were terrestrial but some *N. spectabilis* were somewhat epiphytic also.

We saw another *Nepenthes* that is different than the others we saw in the higher highland areas. It has small pitchers slightly similar to *N. tentaculata*, *N. tobaica* and *N. gracilis* but tougher and thicker. The pitchers are always nicely colored with blackish lines and markings similar to *N. fusca*. There was very little variation with this species as all mature plants had ample rosettes on the ground and also at intervals up the stem. The stems were slimming up to about 7 meters and had upper pitchers similar in color and shape to the lower pitchers but with the usual differences. The male inflorescences were about 20 centimeters, peduncle inclusive.

The other species we saw was *N. spectabilis* and these seemed a little different than the plant in Kondo's book. The New Zealand grown *N. spectabilis* has very hirsute leaves, stems and pitchers, and leaves and pitchers were a darker green in color. We collected seed of all *Nepenthes* on this mountain except the small *Nepenthes* with blackish pitchers. Hybrids between most or all the species looked quite nice indeed.

At this time, we went to Medan and Mide flew out to Singapore for a few days before going home while Bruce and I shot up to Brastagi for 3 days to laze around while waiting to fly across to Kuala Lumpur. While in this area we noted the detail and color range of *N. tobaica* pitchers which were a pure green to black and general reds in between. They seemed to like the local scrub and especially tea trees and so it felt like we were back in New Zealand. It was like this in many areas of Sumatra and the scenery is very similar in natural areas with similar species of plants. We also saw some *N. tobaica*-like plants at 1,900 meters or more on G. Dibayak near the crater and on one plant a pitcher had spots similar to pitchers of *N. reinwardtiana* but the pitchers were too large to be *N. tobaica* and perhaps is a hybrid of the two species mentioned. Near the area is Lau dubuk dubuk where Danser recorded *N. reinwardtiana*. We feel that *N. tobaica* is not as closely related to *N. reinwardtiana* as some think it is; but, of course, its still in the same group. In some other areas as Jambi, we found hybrids of *N. reinwardtiana* x *N. gracilis* and these can look similar to the parents.

After what we saw in Sumatra, we feel a need to return annually and check out new areas for *Nepenthes* and also clean up the classification of Sumatran *Nepenthes*. We would do this by first going to Bogar to review the original sheets in the herbarium to study what is there. Since our return, for example, we have read notes on plants from G. gadut near Padang. Plants that were named as *N. bongso* are identical to *N. inermis* and a plant labeled *N. alata* is *N. mirabilis*. It is all very confusing. Its time that a good book was written on *Nepenthes* and hopefully in time all of us interested in this *Nepenthes* project can come up with good color photos and descriptions of all species and forms possible. I have been thinking about this for some time now and I know others would be willing to contribute.

Bruce and I flew Kuala Lumpur and picked up a car for 3 days. We drove up to the Cameron Highlands northeast of K. L. and passed some lowland *Nepenthes* on the way up to 2,000 meters. Sleeping overnight in the car nearly killed us due to the low night temperature. In the morning, we looked in the general area and found plenty of *N. macfarlanei* and some *N. sanguinea*. We obtained plenty of seed and small plants especially where the mower cuts them up after they reach a few inches high. Further down, at 1,800 meters, there was abundant *N. sanguinea* and *N. macfarlanei* x *N. sanguinea* hybrids. Both species are highly variable and larger than those found in the Genting area. Some *N. sanguinea* pitchers were over 12 inches long and one particular one was 16 inches to the top of the lid which was at a 45 degree angle. The color of both species were attractive as well.

From here we headed back down to about 1,100 meters in the Ringlet area and found *N. albomarginata*. We managed to get seed of this species and found our only snake on the trip (apart from a couple on the roads and dead ones). It turned out to be a very docile green pit viper that was coiled up in the fern and *Nepenthes* stems. I pushed at it without seeing it at first while attempting to climb for more seed and saw it as the stems were released. There was no time to worry but I yelled to Bruce to bring the camera and took pictures of the beautiful creature. I gave it a miss on picking the snake up and decided to leave the seed too, of course!

On the way to Fraser's Hill, we found *N. sanguinea* and saw a local with an armful of plants of which he was going to use the leaves for healing skin lesions in the usual way. I was surprised they are still being used this way.

After leaving here, we went up to Genting Highlands traveling on the super-wide road up to the city of resorts. We couldn't believe the development (rather destruction) of buildings and roadways here. In the building site areas, we collected ample *N. gracillima*, *N. macfarlanei*, hybrids of the two and some *N. sanguinea*. More seed of *N. macfarlanei* was available here. During the day it was 13 degrees C (55 F). Now I know why my highland *Nepenthes* like our winter and surrounding months best as it suits their growing temperatures well.

During these 3 days, I was running around with bare feet and shorts and I never got a single leech on me, but somehow Bruce did while cleaning up at the stream. So he put toothpaste on the little vampire and it quickly let go! It worked as good as the repellent did in Sumatra!

We returned the car and went to Singapore for a couple of days and then flew to Kuching from Johore Boru. We spent 2 weeks in Sarawak and saw the general lowlanders as well as rather nice *N. northiana* and nicely-striped *N. albomarginata* in the Bau area. On G. Serapi we found *N. albomarginata* growing epiphytically up in the trees and not on the ground except in a couple of instances. Also found was *N. tentaculata* and *N. hirsuta* of which the *N. hirsuta* was mottled in a rust color. These three species were growing at 800 meters on the crests and ridges. In the open areas, there were also *N. rafflesiana*, *N. ampullaria*, *N. gracilis* and one *N. reinwardtiana* on the hill but surprisingly no hybrids!

Down in the lowland areas we observed small, black bees visiting the male flowers of *N. mirabilis*. Over the entire trip we took time to smell the flowers and noticed that the lowland species tend to be scented and especially so in the morning. *N. ampullaria* had a nice scent but *N. mirabilis* had a smell I would not like to describe!

While in the Kuching area we saw more *U. subulata* which had larger flowers than plants in any of the Sumatran locations. Also growing in this area was a smaller blue-flowered species and perhaps it was *U. minutissima*. Also at 800 meters on G. Serapi we saw our only *Drosera* on the trip and they were *D. burmanni* growing on an old cleared site.

We all thoroughly enjoyed the trip to see our favorite plants in the wild along with meeting really nice people in Sumatra and Sarawak. The locals were always helpful and friendly and all the tourists we met were really pleasant, too. It really made our trip worthwhile and something to remember. Bruce and I also did some sightseeing in Sarawak and on returning to Singapore, we missed our plane back to New Zealand. We were able to fly back the next day via Christchurch to Auckland. We got through customs and agriculture alright and all the *Nepenthes* are fine in quarantine. Also, the seed germinated well except some seed of *N. alata x truebiana* which was not ripe enough but we gave it a go anyway.

I would like to thank Robert Kresanek, Greg Gamble, Claus Thiede, Lee Braithwaite and Phil Cotter for supplying me with monograph material and maps. Thanks also to my wife Hazel and parents who funded my trip. Claus also supplied me with maps which were of excellent use.

All the plants are rooting well except the *N. northiana* cuttings. Nice pitchers are forming and in time I may send a few photos for CPN. It may be of interest that I found *Nepenthes* seed can take up to six months to germinate while some of mine took four months from the seed I collected. I had *Nepenthes* seed take 8 months to germinate after sowing, so do not throw seed away too soon as I found out the hard way!

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Sumatra Tip Additional Notes

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Here are a few additional details of my Sumatran trip which I like to share with you. I have heard that M. Hotta and another author published a monograph in 1986 on *Nepenthes* from North and West Sumatra and if anyone knows where I can locate a copy, I would be most grateful. It may contain a discussion on the *Nepenthes* from Gunung Pangulubao area and their views on the *N. alata* variants.

Although I have plants and seedlings of many species, I could not get any *N. northiana* seed and only got a few cuttings so as not to decimate the colony. It appears that this species was preyed upon by man and so I never got rooted plants. I normally have no problems with cuttings on any species to date, but this species seems rather difficult to strike. I may have to layer plants in the future for success.

The *N. spectabilis* on G. Pangulubao are different than on G. Sibayak as they are darker, very hirsute and leaves are not petiolate at all but are decurrent and yet they are still considered the same species. We also found *N. trichocarpa* in Sibolga and Kuching. This is a lowland hybrid and all our species were highland.

Want Ad

Charles Webb (Rt. 3, Box 241C, Vergennes, VT 05491).

WANTED TO BUY: *Heliamphora*, *Genlisia*, and *Aldrovanda*.

Christopher A. Belanger (988 Brightwood Drive, Toms River, NJ 08753):

TRADE: *Utricularia quelchii* for *U. campelliana* and/or *U. jamesoniana*. (WT) *U. blanchetii*, *U. buntingiana*, *U. chrysantha*, *U. costata*, *U. lloydii*, *U. praetermissa*, *U. endresi*, *U. oliverana*, *U. reniformis*, *U. tenuissima* and any other South American *Utricularia*. (WT) *Pinguicula filifolia*, *P. crenatiloba*, *P. balcanica* and any other Mexican *Pinguicula*. (WT) Any Australian Pygmy *Drosera*. (W) Contact from CP enthusiasts worldwide. Please send me your list.